UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

24197

7590

11/18/2009

KLARQUIST SPARKMAN, LLP 121 SW SALMON STREET SUITE 1600 PORTLAND, OR 97204 EXAMINER

GEBREYESUS, KAGNEW H

ART UNIT PAPER NUMBER

1656 DATE MAILED: 11/18/2009

APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,570	06/02/2006	Hans H. Liao	8127-66576-05	3622

TITLE OF INVENTION: PRODUCTION OF 3-HYDROXYPROPIONIC ACID USING BETA-ALANINE/PYRUVATE AMINOTRANSFERASE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	02/18/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where ar in m

appropriate. All further indicated unless correct maintenance fee notifica	correspondence includir ed below or directed oth	ng the Patent, advance onerwise in Block 1, by (rders and notification of r a) specifying a new corres	naintenance fees v pondence address	vill be ; and/o	mailed to the current r (b) indicating a sepa	correspondence address as rate "FEE ADDRESS" for
CURRENT CORRESPOND	ENCE ADDRESS (Note: Use BI	Fee pap	(s) Transmittal. Th ers. Each additiona	is certii Il paper	ficate cannot be used fo	r domestic mailings of the or any other accompanying nt or formal drawing, must	
24197	7590 11/18	3/2009	nave			· ·	
121 SW SALMO SUITE 1600		P	I he Stat addı tran	reby certify that the es Postal Service v	is Fee(e of Mailing or Transı s) Transmittal is being fficient postage for firs ISSUE FEE address (1) 273-2885, on the day	dission graphs deposited with the United at class mail in an envelope above, or being facsimile ate indicated below.
PORTLAND, O	IK 97204						(Depositor's name)
							(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTC	PRNEY DOCKET NO.	CONFIRMATION NO.
10/581,570	06/02/2006	•	Hans H. Liao		8	3127-66576-05	3622
TITLE OF INVENTION	: PRODUCTION OF 3-	HYDROXYPROPIONIC	C ACID USING BETA-AL	ANINE/PYRUVA	TE A	MINOTRANSFERASE	Ξ
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$ 0		\$1810	02/18/2010
EXAM	EXAMINER ART UNIT			s			
GEBREYESUS	S, KAGNEW H	1656	435-069100				
☐ "Fee Address" ind	oondence address (or Cha B/122) attached. lication (or "Fee Address D2 or more recent) attach	2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.					
PLEASE NOTE: Un	less an assignee is ident th in 37 CFR 3.11. Comp	ified below, no assignee	T a substitute for filing an (B) RESIDENCE: (CITY	atent. If an assign assignment. and STATE OR (COUNT	TRY)	ocument has been filed for
Please check the appropr	riate assignee category or	categories (will not be p	rinted on the patent):	Individual 🖵 C	orporat	ion or other private gro	oup entity Government
*	are submitted: No small entity discount p # of Copies	4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) A check is enclosed. Payment by credit card. Form PTO-2038 is attached. The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).					
5. Change in Entity Sta	`	/					
• •	as SMALL ENTITY state		b. Applicant is no lon				FR 1.27(g)(2). The assignee or other party in
interest as shown by the	records of the United Sta	ites Patent and Trademark	c Office.	пе аррпсані, а гед.	isiereu	attorney of agent, of th	le assignee of other party in
Authorized Signature				Date			
Typed or printed nam	e		Registration N	No			
This collection of inform an application. Confiden submitting the complete this form and/or suggest Box 1450, Alexandria, V Alexandria, Virginia 223	tiality is governed by 35 d application form to the ions for reducing this bu. Firginia 22313-1450. DC	CFR 1.311. The informati U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the ONOT SEND FEES OR	on is required to obtain or re 1.14. This collection is est y depending upon the indiv the Chief Information Office COMPLETED FORMS TO	etain a benefit by t imated to take 12 ridual case. Any co er, U.S. Patent and D THIS ADDRESS	the pub minutes ommen Trader S. SEN	lic which is to file (and s to complete, includin ts on the amount of tir nark Office, U.S. Depa D TO: Commissioner f	by the USPTO to process) g gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	ATION NO. FILING DATE FIRST NAME		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/581,570	10/581,570 06/02/2006		Hans H. Liao	8127-66576-05 3622			
24197	24197 7590 11/18/2009				EXAMINER		
KLARQUIST	SPARKI	MAN, LLP	GEBREYESUS, KAGNEW H				
	121 SW SALMON STREET				PAPER NUMBER		
SUITE 1600 PORTLAND, O	R 97204			1656 DATE MAILED: 11/18/2009			

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 218 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 218 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Interview Summary	10/581,570	LIAO ET AL.	
interview Summary	Examiner	Art Unit	
	KAGNEW H. GEBREYESUS	1656	
All participants (applicant, applicant's representative, PTO	personnel):		
(1) <u>KAGNEW H. GEBREYESUS</u> .	(3)		
(2) Attorney Sheree Lynn Rybak.	(4)		
Date of Interview: <u>15 October 2009</u> .			
Type: a)⊠ Telephonic b)□ Video Conference c)□ Personal [copy given to: 1)□ applicant 2	2)∏ applicant's representative	e]	
Exhibit shown or demonstration conducted: d) Yes If Yes, brief description:	e)⊠ No.		
Claim(s) discussed: <u>1-3,5-10,13-33,35-41,66 and 67</u> .			
Identification of prior art discussed:			
Agreement with respect to the claims f) was reached. g)∏ was not reached. h)⊠ N	J/A.	
Substance of Interview including description of the general reached, or any other comments: <u>See Continuation Sheet</u> .	nature of what was agreed to	if an agreement	was
(A fuller description, if necessary, and a copy of the amend allowable, if available, must be attached. Also, where no c allowable is available, a summary thereof must be attached	opy of the amendments that w		
THE FORMAL WRITTEN REPLY TO THE LAST OFFICE A INTERVIEW. (See MPEP Section 713.04). If a reply to the GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER INTERVIEW DATE, OR THE MAILING DATE OF THIS INT FILE A STATEMENT OF THE SUBSTANCE OF THE INTE requirements on reverse side or on attached sheet.	last Office action has already OF ONE MONTH OR THIRTY ERVIEW SUMMARY FORM, '	been filed, APP / DAYS FROM T WHICHEVER IS	LICANT IS THIS LATER, TO
/Kagnew H Gebreyesus/	/Andrew Wang/		
Examiner, Art Unit 1656	Supervisory Patent Examiner, Art U	nit 1656	

Application No.

Applicant(s)

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner.
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,
 - (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

Continuation of Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: The written description and enablment rejections were discussed with respect to the degree of identity (amendment from 90 to 95% with a functional limitation), the organism used is now a prokaryotic organism. It was agreed that claims 40 and 41 will be amended to depend on claim 1 or cancelled. The hybridization conditions in new claims 69 and 70 will be considered in light of the hybridization conditions in the specification and the art. Applicants argument regarding other methods of disinguishing between lactic acid and 3HPwill be considered.